

PIE-BAR UTILITY  
Computer Program  
by  
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## INTRODUCTION

The PIE-BAR Utility Computer Program is designed to provide a screen dump capability for the ATARI(c) GRAPH IT(c) using an EPSON MX-80 Printer on an ATARI(C) 800 with at least 32K of RAM memory. This program runs with either cassette or disk and features storage and recall of both Pie Graphs and Bar Charts. The storage and recall feature can be easily removed so that the main screen dump feature can be run in 24K of RAM memory.

## LOADING THE PROGRAMS

There are three steps involved in loading and running the computer programs. They are as follows:

1. Type NEW to clear memory. ENTER "D1:PTLBL.BAS" from the PIE-BAR Utility diskette or ENTER "C" from the PIE-BAR Utility cassette. RUN this program. This will load page six of the computer memory with a program written in assembly language and designed for high speed operations.
2. "LOAD" the ATARI(c) GRAPH IT(c) Pie Graph and Bar Chart Program as you would do normally from your cassette or disk. This destroys the PLTBL.BAS program which has already done its job in Step 1.
3. ENTER "D1.PLTPB.P" from the PIE-BAR Utility cassette. This program is stored on cassette right after the program you ENTER'ed in STEP 1.

## RUNNING THE PROGRAM

Type RUN and operate the program as described in the GRAPH IT(c) instructions. The only difference you will notice is that you do not get an EXIT (Y/N) option presented to you when you hit any key after a Pie Graph or Bar Chart has been displayed on the screen.

This feature of GRAPH IT(c) has been replaced by specific key hit instructions issued to the PIE-BAR Utility. The console keys P, W, R, L, X, and Q when pressed without a carriage return will now allow the following features:

P - Prints out the Pie Graph or Bar Chart displayed on the screen to the EPSON MX-80 line printer. As a precaution cycle the power on the MX-80 to reset the printer modes to its initial state. This is normally only required at the beginning of a session.

**W** - Writes the Pie Graph or Bar Chart displayed on the screen to disk or cassette by hitting a D or C after hitting the W. The disk files created are named D1.PIE and D1.BAR for the Pie Graph and Bar Chart respectively. This means that you can store one Pie Graph and one Bar Chart on the disk before worrying about overwriting what was stored before in the files. The cassette is no problem since you keep writing one file after the other and keep track of the tape counter yourself. (Note that a Pie Graph will take about 110 counts on the tape counter and 66 sectors on a disk. The Bar Chart takes about half as much room as the Pie Graph.)

**R** - Reads a previously stored Pie Graph or Bar Chart from the disk or cassette and displays it on the screen. When you hit the R key you are asked to type in a filename such as D1:BAR or C and hit carriage return. You are then asked to type in a 24 or 7 depending on whether the file is a Pie Graph or Bar Chart and hit carriage return. This will transfer the file to the screen for display where it can be printed on the line printer using the P key again if desired.

**L** - Prints the Labels and Data that you typed in while creating the Pie Graph or Bar Chart presently on the screen. You can only use this capability when you first create a display and not when you recall a display from storage. This option gives you a chance to document and double check what data you typed in for your display.

**X** - Returns to the GRAPH IT (c) Menu so you can create another Pie Graph or Bar Chart.

**Q** - Allows you the added flexibility to rename the files D1:BAR and D1:PIE so that more displays can be stored in these files using the W key without leaving the program and entering DOS to accomplish this function. You are asked to input the OLD and NEW filenames in the following form: D1:PIE, PIE1 which renames D1:PIE to D1PIE1.

#### NOTES

1. The PIE-BAR Utility Computer Program is made up of five subroutine calls in statement numbers 10510, 10515, 10520, 10525, and 10535. These GOSUB'S are the P, W, R, L, and Q key options. By deleting the W, R, and Q subroutines, you can run the program in 24K of RAM. To do this delete lines 10515 and 10400 through 10460, lines 10520 and 10310 through 10345, and lines 10535 and 10550 through 10565.

2. A few of the Bar Chart program statements have been changed in the original GRAPH IT(c) version so that a zero input value for any part of a bar will still show a minimum value on the display. This allows you to distinguish between the different parts of the bar on the black and

white line printer plot.

3. To get to the PIE-BAR Utility features, you must run at least one GRAPH IT(c) Pie Graph or Bar Chart.

4. Flow Chart



